

## INTEROFFICE COMMUNICATION

US EPA RECORDS CENTER REGION 5



403987

RECEIVED  
SEP 15 1975  
Water Qual. Control

To: W. Denniston

Subject: Wyandotte Chemicals

From: G. Bailey

North Works

# 1072-75

Date: Sept. 9, 1975

A follow up meeting was held with company officials, Bill Liesten, Nick Caldwell and Joe Wisniach and WRC District 1 staff, Stan Novak and myself. There has been some concern expressed over the rate of recovery and the recovery method. This office was also confused as to the cause and amount of the styrene lost. Marine Pollution Control Corporation reports that 5400 gallons of styrene (100%) have been recovered. BASF reports that this figure should be 7000 gallons. The company estimates that the total volume lost was 15000 gallons from a 50000 gallon tank. The tank had a leak in the bottom. The tank bottom was hidden due to a concrete base around the tank. The center of this base had apparently been filled with sand during construction and did not have the required clay cap.

The loss apparently occurred gradually over a 39 day period. The tank was initially filled in July. The leak was not discovered until Aug. 27, 1975 when the tank was unloaded. After being emptied, the tank was filled with water which lost 300-400 gallons in volume over a weekend. The styrene itself was discovered in an electrical conduit east of the tank area. Initially the styrene thickness was several inches in the conduit. The layer now is about 1/8 of an inch thick. The conduit normally contains water showing a high groundwater table in the area. An interceptor trench has been dug at a depth of 3-4 feet on the east side of the diked area. This ditch is intercepting groundwater and styrene which is pumped off at regular intervals by a licensed waste hauler. Test holes have been sunk further east of the interceptor ditch and conduit. There was no evidence of any styrene in these holes or in one sunk west of the diked area. A portion of the styrene in the trench had polymerized. This is caused by exposure to air and/or chemical reaction with material in the ground. The area has all been filled with waste chemical sludges and/or product during the past 50 years.

It was suggested that the company sink test holes directly under the diked area to see if the styrene has pocketed there. If not, then the interceptor will continue to be used to collect the styrene. The question of where the remaining 8 or 9 thousand gallons are can not be fully answered. The recovery rate has slowed greatly since August. It is doubtful that a 100% recovery will be possible. A portion of the material has undoubtedly polymerized and will not leach out of the soil. Some of the styrene also probably vaporized. The company was advised to keep a close inventory on the recovered volume. District 1 will continue to monitor the clean-up operation.

GB:gm

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